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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,787	06/06/2001	Venkatasubramanian Ananthanarayanan	DP-304512	5489

7590 07/15/2003
DELPHI TECHNOLOGIES, INC.
Legal Staff
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Mail Code: 480-414-420
Troy, MI 48007-5052

EXAMINER

RUTHKOSKY, MARK

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 07/15/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

134

Office Action Summary

Application N .

09/875,787

Applicant(s)

ANANTHANARAYANAN ET AL.

Examiner

Mark Ruthkosky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2001 .
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings filed on 6/6/2001 have been approved.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hollis et al. (US 3,849,203.)

The instant claims are to a battery terminal for a battery case having a wall defining an inner surface of the case and an outer surface of the case. An aperture extends between the inner and outer surfaces of the case and the terminal including a barrel portion defining an outer circumferential surface extending through the aperture. One end of the barrel portion terminates in an outwardly projecting section from the outer surface of the case and a circumferentially extending, radially outwardly projecting shoulder on the opposite end of the barrel portion engaging the inner surface of the case when the barrel portion is inserted in the aperture. An

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annular retaining ring having an inner circumferential surface is installed on and secured to the outwardly projecting section of the barrel portion, which defines a radially projecting surface engaging the outer surface of the case.

Hollis et al. (US 3,849,203) teaches a battery terminal for a battery case having a wall defining an inner surface of the case and an outer surface of the case. An aperture extends between the inner and outer surfaces of the case and the terminal including a barrel portion defining an outer circumferential surface extending through the aperture. One end of the barrel portion terminates in an outwardly projecting section from the outer surface of the case and a circumferentially extending, radially outwardly projecting shoulder on the opposite end of the barrel portion engaging the inner surface of the case when the barrel portion is inserted in the aperture (see figures 1-2.) An annular retaining ring having an inner circumferential surface is installed on and secured to the outwardly projecting section of the barrel portion, which defines a radially projecting surface engaging the outer surface of the case (col. 2, lines 3-50.) The outer circumference of the barrel portion and the inner circumference of the surface of the retaining ring are dimensioned to receive the ring on the barrel portion with an interference fit there between that is fused together. The heating process for deforming the ring and bushing is considered a weld as the elements are fused together. Thus, the claims are anticipated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 12, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollis et al. (US 3,849,203.)

The instant claims include the limitations that the step of heating the interface between the retaining ring and the projecting portion includes passing an electrical current through the retaining ring while pressing the ring into position. The teachings of Hollis et al. (US 3,849,203) have been presented. Hollis does not teach heating the interface by passing an electrical current through the retaining ring. Hollis does teach heating the ring interface as previously described. It would be obvious to one of ordinary skill in the art at the time the invention was made to use electrical current to heat the metal ring, as the current will produce heat by from the resistant of the metal. As passing current through a metal is well known in the art for producing heat and heating the ring is well described in Hollis et al. (US 3,849,203), it would be obvious to one of ordinary skill in the art to heat the ring by passing current through the interface in order to fuse the materials. The artesian would have found the claimed invention to be obvious in light of the teachings of the reference.

Examiner Correspondence

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1193. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 703-305-0587. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:00.) If attempts to reach

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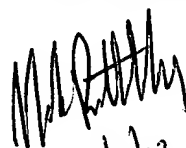
the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at 703-308-2383.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Mark Ruthkosky

Patent Examiner

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7/8/03